Asignment

Information Assets

BY: REZG. YOUSSEF. HASSAN. AL-SUNAH
& ABD . AL-RHMAN . ALMULIKI

SUPERVISOR: ASST. DOCTORE . WEDAD MANSURE

Clinical Pharmacy Faculty,L2,EIU

Sana'a,Yemen

Rheumatoid Arthritis

Rheumatoid arthritis (RA): is a chronic systemic inflammatory disease whose hallmark feature is a persistent symmetric polyarthritis (synovitis) that affects the hands and feet (see the image below).

Any joint lined by a synovial membrane may be involved, however, and extra-articular involvement of organs such as the skin, heart, lungs, and eyes can be significant . RA is theorized to develop when a genetically susceptible individual experiences an external trigger (eg, cigarette smoking, infection, or trauma) that triggers an autoimmune reaction.

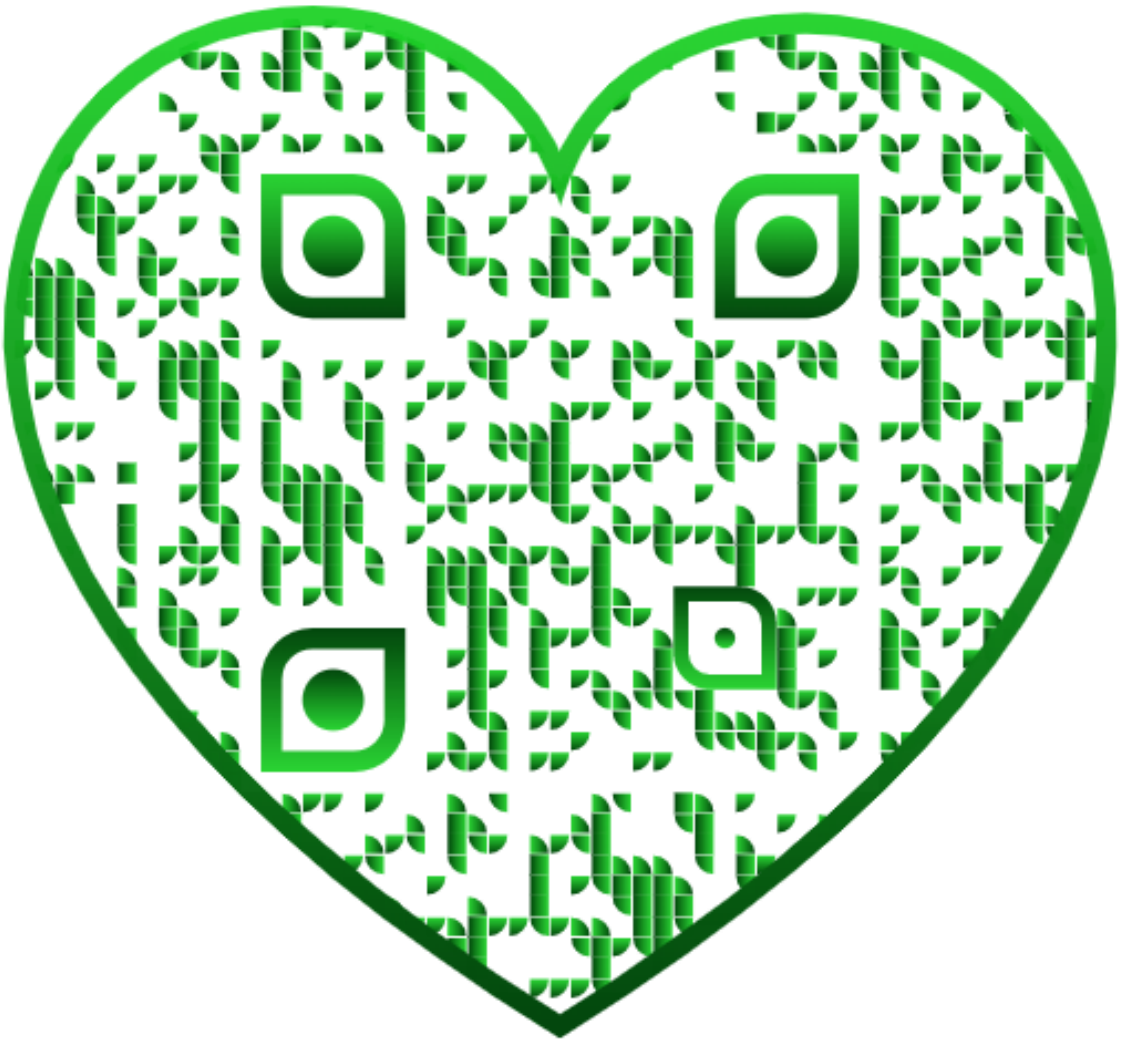
See Rheumatoid Arthritis: In and Out of the Joint, a Critical Images slideshow, to help identify the distinguishing features of RA as well as the signs of extra-articular manifestations of this disfiguring disease.

Signs and symptoms of rheumatoid arthritis.

In most patients with RA, onset is insidious, often beginning with fever, malaise, arthralgias, and weakness before progressing to joint inflammation and swelling.

Signs and symptoms of RA may include the following:

. Persistent symmetric polyarthritis (synovitis) of hands and feet (hallmark feature)
. Progressive articular deterioration
. Extra-articular involvement
. Difficulty performing activities of daily living (ADLs)



This is some herbs which used for treatment of rheumatoid arthritis...

1- Boldo tree Peumus boldo Molin

. Synonyms: Boldea fragrans (Pers.) Endl.; Boldu boldus (Molina) Lyons; P. fragrans Pers.

. Family: Monimiacea

. Other common names: Boldus.

. Drug name: Boldi folium

. Botanical drug used: Leaves

. Indications/uses:

Mild digestive disturbances, Rheumatoid Arthritis , gallstones, cystitis, rheumatism; often used as an aid to slimming.

. Evidence:

There is well-documented support for traditional use but no clinical evidence available.

. Safety:

The leaf is considered safe but the essential oil contains a toxic component, ascaridole, so boldo should be used with caution and not in large doses or for extended periods of time. It is not suitable for use in children or in pregnancy and breastfeeding, and despite the traditional use for liver disorders, adverse effects have been reported with high doses and boldo should be avoided in patients with liver and kidney disease.

. Main chemical compounds:

The leaves contain alkaloids (mainly boldine, isoboldine and dehydroboldine, with isocorydine, laurotetanine, reticuline, pronuciferine, sinoacutine and other derivatives) and essential oil, the main components of which are p-cymene, ascaridole, 1,8–cineole, fenchone, linalool, α-terpineol and terpinen–4–ol .

. Interactions:

A single case report suggests that it may interact with warfarin, raising the INR slightly,although no other effects (bleeding, bruising, etc.) were observed, and the patient was also taking a fenugreek supplement .

. Pre-clinical evidence and mechanisms of action:

Boldine is a potent antioxidant and has anti inflammatory effects It has been suggested to protect against chemotherapy induced lipoperoxidation and has been shown to reverse ROS formation and restore endothelial function in STZ-induced diabetes in animals . Boldine has been found to modulate the expression of regulators of adipogenesis and adiponectin levels, which may support the traditional use in obesity.

. Contraindications:

Pregnancy, breastfeeding, obstruction of bile duct, cholangitis, liver disease, gallstones and any other biliary disorders that require medical supervision and advice.

2- Feverfew زهرة الذهب

Tanacetum parthenium (L.) Sch.Bip.

Synonyms: Chrysanthemum parthenium (L.) Bernh.; Leucanthemum parthenium (L.) Godr. & Gren.; Pyrethrum parthenium (L.) Sm.; and others.

Family: Asteraceae (Compositae)

Other common names: Altamisa; featherfew; featherfoil

Drug name: Tanaceti parthenii herba

Botanical drug used: Herb

Indications/uses: Registered products are available fo the prevention of migraine headaches. Feverfew hastraditionally been used for fever, as the name suggests, as well as rheumatic conditions, coughs and colds.

Evidence: There is some evidence of efficacy for the prophylaxis of migraines but as often the quality and the size of the studies makes an assessment problematic.

Safety: Overall considered to be safe, but side effects are common, especially with higher doses. Should be avoided in pregnancy and breast-feeding.

Main chemical compounds; The main active constituents are sesquiterpene lactones, mainly parthenolide and its esters, with santamarin, reynosin, artemorin, partholide and chrysanthemonin. Other compounds present are flavonoids such as kaempferol tanetin and quercetagetin, and volatile oil consisting of α-pinene, bornyl acetate, bornyl angelate, costic acid, camphor and spirotekal ethers.

clinical evidence for Rheumatoid arthritis: A double-blind, placebo-controlled study of a dried powdered feverfew leaf extract (70–86 mg, equivalent to 2–3 µmol parthenolide, daily for 6 weeks) in women (41 participants) with symptomatic rheumatoid arthritis showed no apparent benefit from feverfew compared to placebo.

Interactions: May interact with antiplatelet (e.g. aspirin, clopidogrel) and anticoagulant drugs (e.g. warfarin). Patients should avoid feverfew with these drugs, and should also discuss any bleeding or bruising episodes that occur with a health care professional.

Contraindications: Not recommended during pregnancy and lactation due to lack of safety data, andbecause p arthenolide is cytotoxic. Not recommended in children and adolescents under 18 years of age or in patients with hypersensitivity to plants from the Asteraceae .

Adverse effects: Feverfew can cause allergic reactions and cytotoxicity symptoms such as mouth ulcers, due to the presence of sesquiterpene lactones (especially parthenolide) ,Gastrointestinal disturbances have also been reported .

Dosage: As recommended by the manufacturer. An average dose is 100 mg of powdered dried feverfew herb a day , but folklore use also recommends 2–3 fresh leaves daily taken with food.

3- Willow (Bark) الصفصاف

Salix alba L., S. nigra L., S. × fragilis L., S. purpurea L. and other Salix spp.

Family: Salicaceae

Other common names: S. alba: European willow, white willow; S. nigra: black willow, pussy willow; S. × fragilis: crack willow; S. purpurea: purple osier

Drug name: Salicis cortex

Botanical drug used: Bark

Indications/uses: The bark of various willow species has been used for treating a wide range of ailments, including fever, headache, influenza, rheumatism, gout and arthritis and is sold in products throughout Europe.

Evidence: There is moderate evidence for the use of willow bark extract in acute and chronic non-specific low-back pain and osteoarthritis.

Safety: Overall it is considered to be safe, although willow bark is not suitable for patients under 18 years and other groups of patients where aspirin is contraindicated those allergic to salicylates, asthma and peptic ulcer, glucose-6-phosphate dehydrogenase deficiency, during the third trimester of pregnancy and when breastfeeding.

Main chemical compounds:

The main constituents are the phenolic glycosides salicin, acetylsalicin, salicortin, salireposide, picein, triandrin. Esters of salicylic acid, salicyl alcohol, flavonoids including ampelopsin, taxifolin and derivatives, catechin and tannins are also presen.

Interactions:

It may increase the effects of anticoagulants such as warfarin and other coumarin derivatives, increasing the risk of bleeding. Due to potential interaction with antiplatelet drugs, NSAIDs, and anticoagulants, caution is warranted.

Contraindications:

Willow bark extracts are contraindicated in children and adolescents less than 18 years, patients with asthma, active peptic ulcer disease, in cases of severe liver or renal dysfunction, coagulation disorders, gastric/duodenal ulcer and glucose-6-phosphate dehydrogenase deficiency and anyone allergic to salicylates. Willow bark extracts should be avoided during pregnancy and lactation .

Adverse effects:

Allergic reactions such as rashes, urticaria, asthma and gastrointestinal symptoms (nausea, vomiting, abdominal pain, diarrhoea, dyspepsia and heartburn) may occur .

Dosage: Extracts are normally standardised to a minimum of 1.5% of total salicylic derivatives (expressed as salicin). For adults, the dose range for dry aqueous extract is 480–600 mg twice a day, for powdered herbal substance, it is 260–500 mg three times a day and as herbal tea, it is 1–3 g three to four times a day. Duration should be restricted to a maximum of 4 weeks .

References:

- *medscape .*
- *Phytopharmacy: An evidence-based guide to herbal medicinal products . Sarah E. Edwards Inês da Costa Rocha . Elizabeth M. Williamson . Michael Heinrich.*
- *HANDBOOK OF Medicinal Herbs . scoend edition. James A. Duke with Mary Jo Bogenschutz-Godwin Judi duCellier Peggy-Ann K. Duke.*
- *Rational Phytotherapy A Reference Guide for Physicians and Pharmacists Fifth edition, fully revise d and expanded With 97 figures and 53 tables.*